CLAIMS

1. A polyester fiber comprising polyethylene terephthalate at 90 mol% or higher of a whole repeating unit in a molecular chain thereof, the fiber having an intrinsic viscosity [IV] of 0.85 dl/g or higher and simultaneously meeting the following characteristics:

(a) strength $\geq$ 6.0 cN/dtex;

(b) strength x (breaking elongation)$^{0.5}$ $\leq$ 26.0 cN/dtex.%$^{0.5}$;

(c) monofilament linear density $\leq$ 5.0 dtex; and

(d) main dispersion peak temperature of loss tangent (tan δ) in the measurement of dynamic viscoelasticity at 110 Hz $\leq$ 147.0°C.

2. The polyester fiber according to claim 1, wherein the strength x (breaking elongation)$^{0.5}$ is 25.0 cN/dtex.%$^{0.5}$ or lower.

3. The polyester fiber according to claim 1, wherein the strength x (breaking elongation)$^{0.5}$ is 24.0 cN/dtex.%$^{0.5}$ or lower.

4. The polyester fiber according to claim 1, wherein the strength x (breaking elongation)$^{0.5}$ is 23.0 cN/dtex.%$^{0.5}$ or lower.

5. A polyester dipped cord, which is obtainable by twisting one or more than one base yarn together into a pretwisted yarn, where the base yarn is made of a polyester fiber according to any one of claims 1 to 4; twisting two or more pretwisted yarns together into a greige cord; and subjecting the greige cord to dip treatment to give a dipped cord simultaneously meeting the following characteristics:

(a) tenacity conversion efficiency in the dip treatment (dipped cord tenacity / greige cord tenacity) $\geq$ 96%; and

(b) elongation at a specific load + dry heat shrinkage $\leq$ 7.5%.

6. The polyester dipped cord according to claim 5, wherein the tenacity conversion efficiency in the dip treatment (dipped cord tenacity /

greige cord tenacity) is 98% or higher.